

WHAT IS CLAIMED IS:

An apparatus for processing graphical objects, comprising:

a plurality of binning memory areas associated with regions that are intersected by graphical objects;

a binning engine for receiving the graphical objects, wherein the binning engine identifies and discards graphical objects that would not be viewable to a user and replicates the remaining graphical objects into the plurality of binning memory areas; and

a rendering engine for rendering the graphical objects in the plurality of binning memory areas.

- 2. The apparatus of claim 1 wherein the binning engine identifies and discards back facing graphical objects.
- 3. The apparatus of claim 2 wherein the graphical objects include back facing triangles.
- 4. The apparatus of claim 1 wherein the binning engine identifies and discards front facing graphical objects.
- 5. The apparatus of claim 4 wherein the graphical objects include front facing triangles.
- 6. The apparatus of claim 1 wherein the binning engine identifies and discards degenerate graphical objects.
- 7. The apparatus of claim 6 wherein the degenerate graphical objects include degenerate points, lines, triangles and rectangles.
- 8. The apparatus of claim 1 wherein the binning engine identifies and discards those graphical objects that would not be viewable to a user per an instruction stream.

- 9. The apparatus of claim 1 wherein the binning engine further assign those graphical objects that are not discarded to the plurality of binning memory areas associated with the regions intersected.
- 10. The apparatus of claim 1 wherein the binning engine identifies and discards those graphical objects having vertices disposed in a specific orientation.
- 11. A method for processing graphical objects, comprising:
 establishing a plurality of binning memory areas associated with regions that
 are intersected by graphical objects;

identifying and discarding graphical objects that would not be viewable to a user;

replicating the remaining graphical objects into the plurality of binning memory areas; and

rendering the graphical objects in the plurality of binning memory areas.

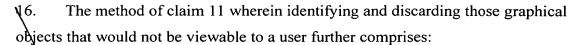
12. The method of claim 11 wherein identifying and discarding those graphical objects that would not be viewable to a user further comprises:

identifying and discarding back facing graphical objects that would not be viewable to a user after being rendered.

- 13. The method of claim 12 wherein the graphical objects include back facing triangles.
- 14. The method of claim 11 wherein identifying and discarding those graphical objects that would not be viewable to a user further comprises:

identifying and discarding front facing graphical objects that would not be viewable to a user.

15. The method of claim 14 wherein the graphical objects include front facing triangles.



identifying and discarding degenerate graphical objects that would not be viewable to a user.

- 17. The method of claim 16 wherein the degenerate graphical objects include degenerate points, lines, triangles and rectangles.
- 18. The method of claim 11 wherein the identifying and discarding those graphical objects that would not be viewable to a user further comprises:

identifying and discarding those graphical objects that would not be viewable to a user per an instruction stream.

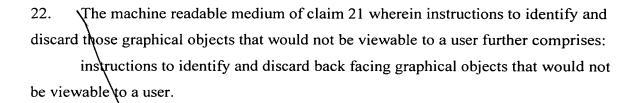
- 19. The method of claim 11 further comprising: assigning those graphical objects that are not discarded to the memory areas associated with the regions intersected.
- 20. The method of claim 11 further comprising: identifying and discarding those graphical objects having vertices disposed in a specific orientation.
- 21. A machine readable medium having stored therein a plurality of machine readable instructions executable by a processor to process graphical objects, the machine readable instructions comprising:

instructions to establish a plurality of binning memory areas associated with regions that are intersected by graphical objects;

instructions to identify and discard graphical objects that would not be viewable to a user;

instructions to replicate the remaining graphical objects into the plurality of binning memory areas; and

instructions to render the graphical objects in the plurality of binning memory areas.



- 23. The machine readable medium of claim 22 wherein the graphical objects include back facing triangles.
- 24. The machine readable medium of claim 21 wherein instructions to identify and discard those graphical objects that would not be viewable to a user further comprises: instructions to identify and discard front facing graphical objects that would not be viewable to a user.
- 25. The machine readable medium of claim 24 wherein the graphical objects include front facing triangles.
- 26. The machine readable medium of claim 21 wherein instructions to identify and discard those graphical objects that would not be viewable to a user further comprises: instructions to identify and discard degenerate graphical objects that would not be viewable to a user.
- 27. The machine readable medium of claim 26 wherein the degenerate graphical objects include degenerate points, lines, triangles and rectangles.
- 28. The machine readable medium of claim 21 wherein the instructions to identify and discard those graphical objects that would not be viewable to a user further comprises:

instructions to identify and discard those graphical objects that would not be viewable to a user after being rendered per an instruction stream.

29. The machine readable medium method of claim 21 further comprising: instructions to assign those graphical objects that are not discarded to the memory areas associated with the regions intersected.

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The machine readable medium method of claim 11 further comprising: instructions to identify and discard those graphical objects having vertices disposed in a specific orientation.